

LISTING OF CLAIMS

This listing of claims replaces all prior versions and listings of claims in the patent application.

Claim 1 (cancelled)

Claim 2 (currently amended): A polarization maintaining optical fiber preform comprising:

a core element;

a cladding element disposed around the core element; and

two stress applying elements disposed in the cladding element to be approximately symmetrical with respect to the core element;

~~which is produced by forming an optical fiber preform including the core element and the cladding element, the preform formed by~~ forming one insertion hole in the cladding element so as to pierce through the cladding element in parallel to the core element, ~~and then~~

subsequently rotating the optical fiber preform further including the insertion hole 180 degrees around the core element, followed by forming the other insertion hole in the cladding element so as to pierce through the cladding element in parallel to the core element, and ~~then~~ subsequently inserting the stress applying elements into the insertion holes.

Claim 3 (current amended): A polarization maintaining optical fiber ~~according to claim 1, which is~~ produced from the polarization maintaining optical fiber preform according to claim 2.

Claim 4 (currently amended): A method of producing a polarization maintaining optical fiber preform including a core element, a cladding element disposed around the core element, and two stress applying elements disposed in the cladding element to be approximately symmetrical with respect to the core element, comprising:

~~a step of forming an optical fiber preform including the core element and the cladding element;~~

a step of forming one insertion hole in the cladding element so as to pierce through the cladding element in parallel to the core element;

a step of rotating the optical fiber preform further including the insertion hole 180 degrees around the core element;

a step of forming the other insertion hole in the cladding element so as to pierce through the cladding element in parallel to the core element; and

a step of inserting the stress applying elements into the insertion holes.

Claim 5 (original): A method of producing a polarization maintaining optical fiber comprising:

a step of melting and drawing the polarization maintaining optical fiber preform produced by the method according to claim 4.

Claim 6 (new): A polarization maintaining fiber according to claim 3, wherein an angle formed by a line connecting a center of one of stress applying portion with a center of the core and a line connecting a center of the other stress applying portion with the center of the core is 3 degrees or less.

Claim 7 (new): A method of producing a polarization maintaining optical fiber preform including a core element, a cladding element disposed around the core element, and two stress applying elements disposed in the cladding element to be approximately symmetrical with respect to the core element, comprising:

a step of forming one insertion hole in the cladding element so as to pierce through the cladding element in parallel to the core element;

a step of rotating the optical fiber preform further including the insertion hole 180 degrees around the core element;

a step of forming the other insertion hole in the cladding element so as to pierce through the cladding element in parallel to the core element; and

a step of inserting the stress applying elements into the insertion holes;

whereby an angle formed by a line connecting a center of one of stress applying portion with a center of the core and a line connecting a center of the other stress applying portion with the center of the core is 3 degrees or less.

Claim 8 (new): A method of producing a polarization maintaining optical fiber comprising:

a step of producing a polarization maintaining optical fiber preform by the method of claim 7; and

a step of melting and drawing the polarization maintaining optical fiber preform to produce the polarization maintaining optical fiber.

Claim 9 (new): A polarization maintaining optical fiber preform produced by the method of producing a polarization maintaining optical fiber preform according to claim 7.

Claim 10 (new): A polarization maintaining optical fiber produced by the method of producing a polarization maintaining optical fiber according to claim 8.